CLAIMS

1. A method of facilitating the transmission of medical images on a network, the method comprising the steps of:

receiving a transaction request, said transaction relating to the delivery of medical images on a network;

scheduling the transaction request for delivery on the network;

reserving network resources for transaction request.

2. The method of claim 1, wherein the step of scheduling comprises understanding a work flow of transactions on the network.

3. The method of claim 2, wherein the step of understanding the work-flow comprises anticipating upcoming transaction requests from at least one of other transaction requests, statistics, and transaction patterns.

4. The method of claim 1, wherein the step of scheduling comprises ascertaining a relative priority of the transaction request compared to other transaction requests.

5. The method of claim 4, wherein ascertaining a relative priority comprises implementing a network policy.

6. The method of claim 5, wherein the network policy sets relative priority of transaction requests based on the time of day, who issued the transaction request, where the transaction request was issued, and why the transaction request was issued.

7. The method of claim 4, wherein ascertaining a relative priority comprises determining, from the transaction request, who issued the transaction request, where the transaction request was issued, and why the transaction request was issued.

8. The method of claim 4, wherein the step of scheduling comprises adjusting a schedule of the other transaction requests.

9. The method of claim 1, further comprising generating a histogram of traffic patterns on the network on at least one of a daily and weekly basis.

10. The method of claim 4, wherein the step of scheduling comprises scheduling the transaction request to occur at a point in the future.

11. The method of claim 10, wherein the transaction request specifies a requested timing, and wherein the requested timing is under-constrained.

12. The method of claim 1, further comprising the step of coordinating with a data source to transmit data over the scheduled resources.

13. The method of claim 1, wherein the step of reserving network resources comprises setting a class of service for the transaction request.

14. The method of claim 1, wherein the step of reserving network resources comprises interfacing with network elements to allocate at least one of a route and a path through the network.

15. The method of claim 14, wherein the step of reserving network resources further comprises reserving bandwidth on the allocated route or path.

16. The method of claim 1, wherein the step of reserving network resources comprises rate-limiting applications to prevent the applications from transmitting data on the network.

17. A medical image transport service configured to schedule network resources on a switched underlay network, comprising:

a data management service, said data management service being configured to perform network topology discovery, route creation, and path allocation; and

a network resource manager, said network resource manager being configured to interface network devices in the switched underlay network to schedule network resources on the switched underlay network;

wherein at least one of the data management service and the network resource manager is configured to schedule requests for the network resources on the switched underlay network.